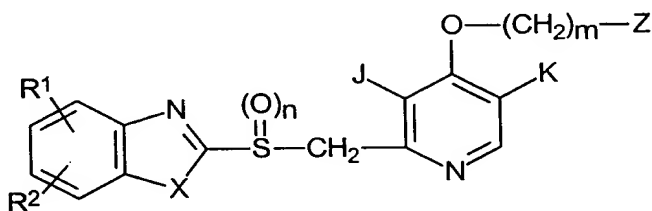


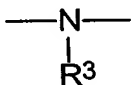
IN THE CLAIMS:

1. An aqueous pharmaceutical formulation suitable for intravenous injection comprising:
an anti-ulcerative compound having the following formula:



wherein R^1 and R^2 are independently selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, halogenated lower alkyl, lower alkoxycarbonyl, a carboxyl group, and halogen;

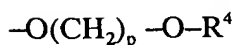
X is a member selected from the group consisting of $-O-$, $-S-$ or



where R^3 is a member selected from the group consisting of hydrogen, lower alkyl, phenyl, benzyl, and lower alkoxycarbonyl; and

Z is selected from the group consisting of:

(1) a group of the formula:



where p is an integer of 1 to 3 and R^4 is a hydrogen atom or a lower alkyl, aryl or aralkyl group;

(2) a group of the general formula:

1 $-\text{O}(\text{CH}_2)_q-\text{R}^5$

2 where q is an integer of 1 to 3 and R^5 is a halogen atom or an alkoxy carbonyl, aryl or
3 heteroaryl group;

4 (3) a group of the general formula:

5 $-\text{O}(\text{CH}_2)_r-\text{O}(\text{CH}_2)_s-\text{R}^6$

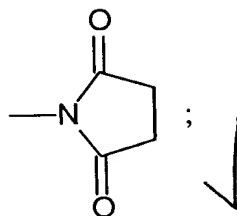
6 where r and s each independently are an integer of 1 to 5 and R^6 is a hydrogen atom or a
7 lower alkyl group;

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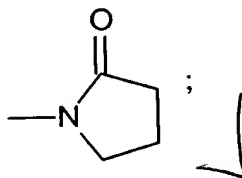
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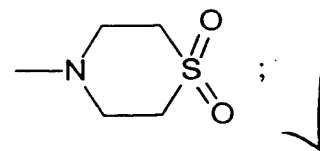
(4) a group of the formula:



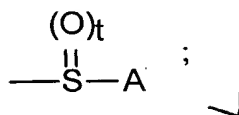
(5) a group of the formula:



1 (6) a group of the formula:

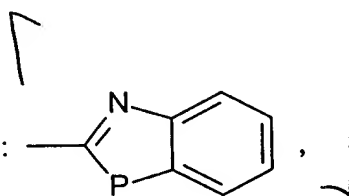


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4 (7) a group of the general formula:

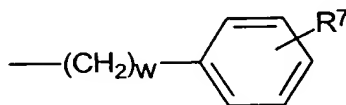


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11 where t is an integer of 0 to 2 and A is a lower alkyl, alkoxy carbonylmethyl, pyridyl or
12 furyl

13 group, or a group of the general formula:

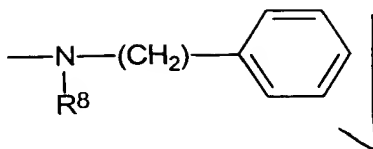


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16 where P is selected from the group consisting of: -NH-, -O- or -S- or a group of the
17 general formula:



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21 wherein R⁷ is hydrogen or lower alkyl and w is from 0 to 3;

1 (8) a group of the general formula: $\text{---N}(\text{R}^8)\text{---}(\text{CH}_2)\text{---}$ where R^8 is an



2
3 acetoxyl or lower alkyl group; and

4 (9) a group of the general formula: ---OR^9

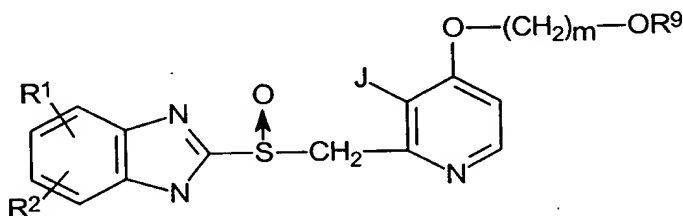
5 where R^9 is a hydrogen atom or a lower alkyl or aryl group;

6 n is an integer of 0 to 2; m is an integer of 2 to 10, and

7 J and K are independently hydrogen or lower alkyl, with the proviso that
8 when Z is a group falling under the above category (9), R^9 is a lower alkyl group and m
9 stands for an integer of 3 to 10, and pharmaceutically acceptable salts thereof; and
10 glycine, in a pharmaceutically acceptable carrier.

2. An aqueous pharmaceutical formulation of claim 1 suitable for
intravenous injection comprising:

an anti-ulcerative compound having the following formula:



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wherein R^4 is selected from the group consisting of hydrogen, lower alkyl, aryl, and aralkyl;

wherein J is selected from the group consisting of hydrogen or lower alkyl;

wherein m is an integer from 2 to 10;

wherein p is an integer from 1 to 3;

and pharmaceutically acceptable salts thereof;

glycine, sodium hydroxide; and

a tonicity agent.

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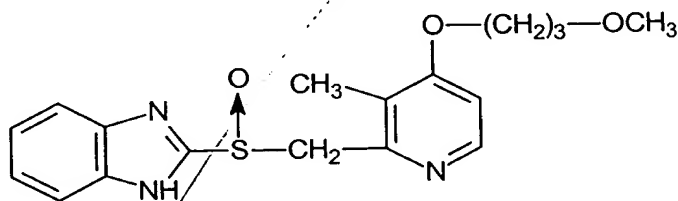
4. The aqueous pharmaceutical formulation suitable for intravenous injection of claim 1 wherein said tonicity agent is selected from the group consisting of sodium chloride, glycerin, mannitol, sucrose, lactose, and dextrose.

5. The aqueous pharmaceutical formulation suitable for intravenous injection of claim 2 wherein said tonicity agent is selected from the group consisting of sodium chloride and dextrose.

6. The aqueous pharmaceutical formulation suitable for intravenous injection of claim 3 wherein said tonicity agent is selected from the group consisting of sodium chloride and dextrose.

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7. The aqueous pharmaceutical formulation suitable for intravenous injection of claim 1 wherein said compound is



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1 8. The aqueous pharmaceutical formulation suitable for intravenous
2 injection of claim 7 wherein said tonicity agent is selected from the group consisting of
3 sodium chloride and dextrose.

1 9. The aqueous pharmaceutical formulation suitable for intravenous
2 injection of claim 8 wherein said tonicity agent is sodium chloride and said sodium chloride
3 is present in said formulation at a concentration of about 0.9% by weight.

1 10. The aqueous pharmaceutical formulation suitable for intravenous
2 injection of claim 8 wherein said tonicity agent is dextrose and said dextrose is present in said
3 formulation at a concentration of about 5% by weight.

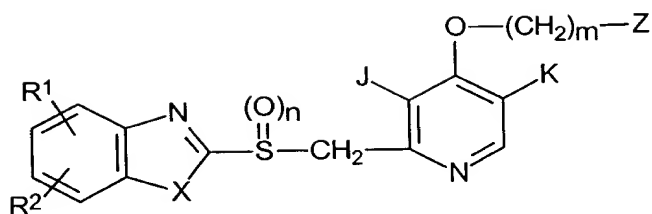
1 11. The aqueous pharmaceutical formulation suitable for intravenous
2 injection of claim 1 wherein said formulation has an alkaline pH, and wherein said glycine in
3 said formulation is present at a concentration of between about 1 mM and 300 mM.

1 12. The aqueous pharmaceutical formulation suitable for intravenous
2 injection of claim 4 wherein said formulation has a pH of between about 9 and about 12, and
3 wherein said glycine in said formulation is present at a concentration of between about 10
4 mM and 300 mM.

1 13. The aqueous pharmaceutical formulation suitable for intravenous
2 injection of claim 8 wherein said formulation has a pH of between about 9 and 12, and
3 wherein said glycine in said formulation is present at a concentration of between about 10
4 mM and 300 mM.

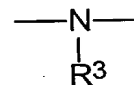
1 14. A method for stabilizing anti-ulcerative formulations suitable for
2 intravenous injection which comprises:
3 providing a compound of the formula
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wherein R^1 and R^2 are independently selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, halogenated lower alkyl, lower alkoxycarbonyl, a carboxyl group, and halogen;

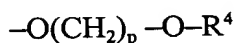
X is a member selected from the group consisting of $-O-$, $-S-$ or



where R^3 is a member selected from the group consisting of hydrogen, lower alkyl, phenyl, benzyl, and lower alkoxycarbonyl; and

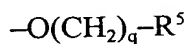
Z is selected from the group consisting of:

(1) a group of the formula:



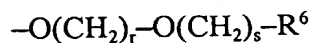
where p is an integer of 1 to 3 and R^4 is a hydrogen atom or a lower alkyl, aryl or aralkyl group;

(2) a group of the general formula:



where q is an integer of 1 to 3 and R^5 is a halogen atom or an alkoxycarbonyl, aryl or heteroaryl group;

(3) a group of the general formula:



where r and s each independently are an integer of 1 to 5 and R^6 is a hydrogen atom or a

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1 lower alkyl group;

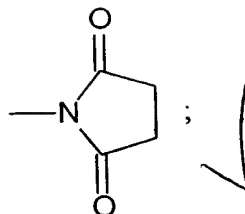
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(4) a group of the formula:



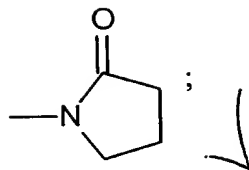
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(5) a group of the formula:



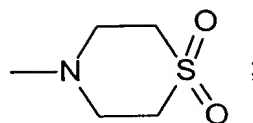
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(6) a group of the formula:

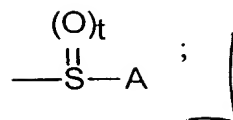


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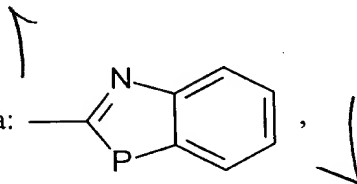
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1 (7) a group of the general formula:

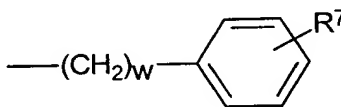


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3 where t is an integer of 0 to 2 and A is a lower alkyl, alkoxy carbonylmethyl, pyridyl or furyl

4 group, or a group of the general formula:

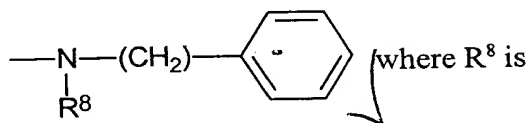


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11 where P is selected from the group consisting of: -NH-, -O- or -S- or a group of the general formula:



12 wherein R⁷ is hydrogen or lower alkyl and w is from 0 to 3;

13
14 (8) a group of the general formula:



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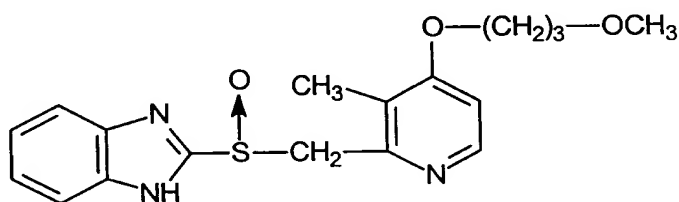
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17 acetoxy or lower alkyl group; and

(9) a group of the general formula: $-OR^9$
 where R^9 is a hydrogen atom or a lower alkyl or aryl group;
 n is an integer of 0 to 2; m is an integer of 2 to 10, and
 J and K are independently hydrogen or lower alkyl, with the proviso that when
 Z is a group falling under the above category (9), R^9 is a lower alkyl group and m stands for
 an integer of 3 to 10, and pharmaceutically acceptable salts thereof;
 providing a solution suitable for intravenous injection which has a pH of
 between about 10 and 11 and which comprises glycine; and
 admixing said compound and said solution until said compound is dissolved in
 said solution.

15. The method of claim 14 wherein said solution contains a solute
 selected from the group consisting of dextrose and sodium chloride.

16. The method of claim 14 wherein said glycine is present in said solution
 at a concentration of between about 10 and about 300 mM.

17. The method of claim 14 wherein said compound is



18. The method of claim 17 wherein said solution contains a solute

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1 selected from the group consisting of dextrose and sodium chloride.

1 19. The method of claim 18 wherein said glycine is present in said solution
2 at a concentration of between about 10 and about 300 mM.

1 20. The method of claim 19 wherein said solution contains a solute
2 selected from the group consisting of dextrose and sodium chloride, and wherein said
3 solution is isotonic with blood plasma.

1 21. The formulation of claim 1, which comprises a tonicity agent.

22. The formulation of claim 1, which comprises sodium hydroxide.

23. The method of claim 11, wherein said alkaline pH is between about 9
and about 12.

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